

## Faceting 121 - Lesson 1C

Beavest

by Arya Akhavan (November 2012)

Angles for R.I. = 1.830

69 + 8 girdles = 77 facets

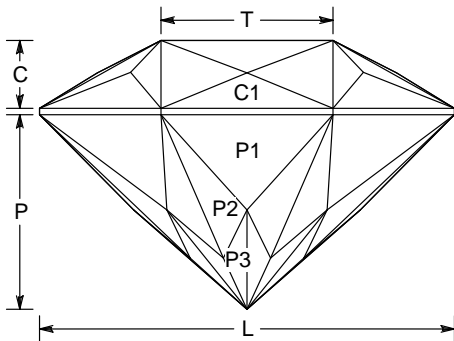
8-fold, mirror-image symmetry

96 index

L/W = 1.000 T/W = 0.414 U/W = 0.414

P/W = 0.469 C/W = 0.164

Vol./W<sup>3</sup> = 0.226



### PAVILION

P1	45.30°	96-12-24-36-48-60-72-84	Cut to centerpoint.
G1	90.00°	96-12-24-36-48-60-72-84	Set stone size.
P2	42.30°	02-10-14-22-26-34-38-46-50-58-62-70-74-82-86-94	Meet P1, G1
P3	41.30°	01-11-13-23-25-35-37-47-49-59-61-71-73-83-85-95	Meet P1, P2

### CROWN

C1	31.52°	96-24-48-72	Set girdle width.
C2	40.00°	12-36-60-84	Level girdle.
C3	36.63°	11-13-35-37-59-61-83-85	Meet G1, C1, C2
C4	29.26°	01-23-25-47-49-71-73-95	Meet G1, C1, C2, C3
C5	27.00°	96-24-48-72	Meet C1, C4; C3, C4
T	0.00°	Table	Meet C3, C4, C5

The third pattern in this lesson adds a "zircon star" to the pavilion, and quite a bit more complexity to the crown. In the finished stone, look at how the extinction pattern has been scattered and the total extinction decreased. Now, try rendering all three designs in amethyst, tanzanite, and YAG, and compare them all!

Lesson rules: cut in purple YAG, trying to match colors with lesson 1A and 1B

C:\PROGRA~2\GemCAD\DESIGN~3\WORKSI~1\6FACET~1.GEM